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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,822	02/27/2004	Kevin L. Loss	030048123US	6968

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EXAMINER

HOLZEN, STEPHEN A

ART UNIT	PAPER NUMBER
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3644

DATE MAILED: 01/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.



Office Action Summary

Application No.

10/788,822

Applicant(s)

LOSS ET AL.

Examiner

Stephen A. Holzen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-57 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-28, 31-43, 46-51, 53, 55-57 is/are rejected.
- 7) ☒ Claim(s) 29, 30, 44, 45, 52 and 54 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5/27/2004</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Priority

1. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120 as follows:

This application is claiming the benefit of a prior filed nonprovisional application under 35 U.S.C. 120, 121, or 365(c). Copendency between the current application and the prior application is required. The applicant has attempted to claim priority to application number 10/707,913 which was officially abandoned on 2/13/2004. The current application was not filed until 2/27/2004. Therefore the applications were not co-pending and the current application is not granted priority.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-14, 17-19, 23-27, 35-39, and 41-43 are rejected under 35 U.S.C. 102(b) as being anticipated by Susko (6,634,598). Susko teaches that it is known to monitor the both the temperature and pressure of oxygen and nitrogen in a fuel tank. Susko further disclose providing a source of nitrogen and a controller for regulating the temperature of the tank, temperature and pressure of oxygen and the inerting fluid flow,

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to and from the gas tank. The controller is responsive to the detection of a partial pressure of oxygen within the tank when the level is above or below a predetermined threshold. (see Col. 3, lines 27-31; Col. 2, lines 25-28; Col. 6, lines 14-17; abstract)

4. Claims 28, 31, 32-34, 43, 46-51, 53, and 55-57 are rejected under 35 USC 102 (b) as being anticipated by Schmutz et al (6,547,188). Schmutz et al discloses a flammability control system that suppresses the development of vapors in a fuel tank and controller operably coupled to the system and receives signals that relate to the operational phase of the vehicle and wherein the controller is further configured to control operation of the flammability control system at least partially in response to the one or more signals (see Abstract and Col. 1, lines 50-60). Schmutz discloses that it is known to use signals that are indicative of various operational phrases of the aircraft including take off, landing, ^{cruising} ~~cursing~~, speeds and height. (see Figure 2).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 15, 16, 20-22 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Susko (6,634,598) in view of Martinov (6,343,465). Susko discloses every aspect of the present invention (see paragraph 3 above) however does not

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disclose the limitations in these claims. Martinov however teaches that it is well known in the art to bleed air from outside the aircraft and use this air to inert the fuel tank, to cool the fuel tank and to cool the air around the fuel tank (see abstract, and Col. 2, lines 50-55), and wherein the controller receives temperature measurement of air outside the fuel tank (see abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use bleed air for the purpose of reducing the overall load the aircraft is required to carry (removing Nitrogen tanks). It would have been obvious to one having ordinary skill in the art to keep the fuel tank at a lower temperature for the purpose of reducing the vapor accumulation within the fuel tank.

Allowable Subject Matter

7. Claims 29, 30, 44, 45, 52, and 54 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The prior art does not disclose a control that is capable receiving signals from the landing gear or an air conditioning system, and further does not disclose using a fan to cool the fuel tank.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen A. Holzen whose telephone number is 703-308-2484. The examiner can normally be reached on M-F 7:30 - 5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Teri Luu can be reached on 703 305-7421. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sah



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SUPERVISORY
PRIMARY EXAMINER